

In addition to the assessment criteria use the paper-specific markscheme below. Award up to the maximum marks as indicated.

1. (a) Define the following terms indicated in bold in the text:

(i) infrastructure (*paragraph ③*) [2 marks]

level

0 *Wrong definition* 0

1 *Vague definition* 1

The idea that government provide things like roads.

2 *Precise definition* 2

Any of the following:

- essential facilities that add to the capital stock of the economy
- capital such as roads typically provided by government to make economic activity possible
- essential facilities such as roads that are necessary for economic activity to take place.

An answer that simply gives examples should not get any marks.

(ii) cross-elasticity of demand (*paragraph ⑥*). [2 marks]

level

0 *Wrong definition* 0

1 *Vague definition* 1

The idea that it is the relationship between two goods.

2 *Precise definition* 2

An explanation that it is responsiveness of the quantity demanded (or demand) of one good to a change in the price of another good. Alternatively, the use of an accurate formula is sufficient for full marks.

- (b) Using an appropriate diagram, explain why the demand for rail travel increases when petrol (gasoline) prices rise (*paragraph 6*). [4 marks]

level

- | | | |
|---|---|-----|
| 0 | <i>Inappropriate answer</i> | 0 |
| 1 | <i>Identification of appropriate theory</i>
For drawing a correctly labelled diagram illustrating a shift in the demand curve for rail travel to the right OR for providing an explanation that the demand for rail travel increases because the price of petrol has risen and so the cost of car (and bus) travel, which is a substitute, has increased. (It is not necessary to include a supply curve on the diagram. This is because according to the article, the price of rail travel has fallen.) | 1-2 |
| 2 | <i>Correct application of appropriate theory</i>
For drawing a correctly labelled diagram illustrating a shift in the demand curve for rail travel to the right and for providing an explanation that the demand for rail travel increases because the price of petrol has risen and so the cost of car (and bus) travel, which is a substitute, has increased. (It is not necessary to include a supply curve on the diagram. This is because according to the article, the price of rail travel has fallen.) | 3-4 |

Other appropriate diagrams should be rewarded if accompanied by a reasonable explanation. These might include:

- a diagram for the car market showing a fall in demand due to the rising cost of petrol, a complement
- a diagram showing an upward-sloping demand curve, with the price of petrol on the vertical axis and the demand for rail travel on the horizontal axis, with an appropriate explanation of the link between the two products.

Candidates who incorrectly label diagrams cannot be rewarded with full marks.

The use of P and Q on the axis is sufficient for a demand and supply diagram. A title is not necessary.

- (c) Using an appropriate diagram, explain why the supply of infrastructure is likely to be inelastic in the short term. [4 marks]

level

- | | | |
|---|---|-----|
| 0 | <i>Inappropriate answer</i> | 0 |
| 1 | <i>Identification of appropriate theory</i>
For drawing a correctly labelled diagram where the supply curve for infrastructure is inelastic (relatively steep and originates from the horizontal axis – quantity supplied) or for providing an explanation that infrastructure involves the addition to the capital stock of a nation, <i>e.g.</i> roads and bridges, however, it cannot be provided easily or added to quickly in the short term. | 1-2 |
| 2 | <i>Correct application of appropriate theory</i>
For drawing a correctly labelled diagram where the supply curve for infrastructure is inelastic (relatively steep and originates from the horizontal axis – quantity supplied) and for providing an explanation that infrastructure involves the addition to the capital stock of a nation, <i>e.g.</i> roads and bridges, however, it cannot be provided easily or added to quickly in the short term. | 3-4 |

Candidates who draw a perfectly inelastic supply curve and explain it correctly may be awarded full marks.

Candidates who incorrectly label diagrams cannot be rewarded with full marks.

The use of P and Q on the axis is sufficient. A title is not necessary.

- (d) Using information from the text/data and your knowledge of economics, evaluate factors that could contribute to increased use of rail services in Australia.

[8 marks]

Responses may include:

- increased government expenditure – an increase in rail infrastructure has led to an increase in investment, employment and income (*paragraph 3*)
- a cut in rail fares – a reduction of 20 % in fares has led to 400 extra services (*paragraph 2*)
- higher prices of substitutes – higher petrol prices and a positive XED (*paragraph 6*)
- a change in taste/preference – a greater awareness of climate change (*paragraph 5*) with a link to negative externalities
- government policies such as interest rate changes (*paragraph 5*) which make it more expensive to borrow money to buy cars and increase loan repayments faster travel reduces the opportunity cost of train travel
- increased population
- road charges (tolls)
- subsidies/concessions for rail travel.

Examiners must be aware that candidates may take a different approach which if appropriate, should be rewarded.

If there is no direct reference to the data, then candidates may not be rewarded beyond level 2.

Effective evaluation may be to:

- consider short-term versus long-term consequences
- examine the impact on different stakeholders
- discuss advantages and disadvantages
- prioritize the arguments.

Level

0	No valid discussion.	0
1	Few relevant concepts recognized. Little discussion or only basic understanding.	1-2
2	Relevant concepts recognized and developed in reasonable depth. Some attempt at application and analysis.	3-5
3	Relevant concepts developed in reasonable depth, demonstrating effective evaluation, supported by appropriate evidence or theory.	6-8